prognostic indicators—the prognosis for women is significantly better than for men for virtually all anatomic sites and the anatomic site as a prognostic factor varies from least risk (extremities) to greatest risk (head and neck), with the trunk posing an intermediate risk. The designations low-risk primary and high-risk primary are applicable only to the most common forms of cutaneous malignant melanoma—that is, superficial spreading and nodular types—which together constitute about 85% of cutaneous malignant melanomas. Unusual variants or unclassifiable primaries cannot presently be evaluated for risk of recurrence or spread, and microstage measurements with risk factors are used only for research purposes in such cases.

Current "standard" therapy for patients with malignant melanoma presenting in clinical stage I (primary excised, no evidence of metastasis) has been reexcision of the primary site to prevent local recurrence. Such patients have an overall five-year survival of about 80%, a better survival than with most forms of cancer. The prognosis for the low-risk-primary group is a better than 98% five-year survival. Patients with a low-risk primary can be treated with *conservative* reexcision (about a 1-cm radius) of the primary tumor site without risk of local recurrence. Patients with high-risk primaries have a prognosis directly related to their risk factors. Such patients may need a more extensive surgical procedure, including wider reexcision and perhaps elective lymph node dissection. The margins of surgical reexcisions are becoming more conservative, and elective node dissections are done less frequently, as findings from large patient populations continue to question the necessity or benefit of such procedures. Reexcisions requiring a graft for closure should be unnecessary in most cases and should not be undertaken as standard therapy for malignant melanoma per se.

RICHARD W. SAGEBIEL, MD

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Sexually Transmitted Gastrointestinal Tract Diseases

SEXUALLY TRANSMITTED gastrointestinal tract diseases in homosexual men encompass a number of protozoal, helminthic, viral, bacterial and chlamydial infections. Though several agents may be present simultaneously in one patient, not all of the infections may be symptomatic, but rather represent a carrier state. Most infections cause a nonspecific inflammatory reaction. The intestinal mucosa shows neutrophils in the lamina propria, increased numbers of lymphocytes or plasma cells and occasional crypt abscesses. There are some characteristic findings, however, that can be helpful in making a specific diagnosis. For example, *Giardia* and *Cryptosporidium* predominate in small bowel diseases. The latter organism on hematoxylin-eosin stain appears as a small, round, blue organism (3 to 7 microns) on the microvillous surface. These organisms stain blue with Giemsa. Periodic acid-Schiff and methenamine silver stains are not helpful because both react with mucins at the cell surface.

Viral inclusions should be diligently sought in colonic biopsy specimens, but are not always identified in culture-positive patients. Multinucleate cells and perivascular lymphocytic cuffing have been described with herpes simplex virus. Cytomegalovirus inclusions, nuclear and cytoplasmic types, can be seen in vascular endothelium, in cells in the lamina propria and in epithelium. Parasites such as *Entamoeba histolytica, Strongyloides, Trichuris* and even *Cryptosporidium* may be seen. If the biopsy specimen is from the rectum and if a prominent plasma cell infiltrate or multinucleate giant cells are seen, syphilis (plasma cells) or chlamydial infection (giant cells) should be looked for. These, as well as other bacteria—such as *Yersinia, Campylobacter, Neisseria, Salmonella* and *Shigella*—may simply cause nonspecific findings. Finally, hepatitis B can be sexually transmitted, and hepatitis A is probably transmitted by this route.

LINDA D. FERRELL, MD

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Secondary Diseases in Immunosuppressed Patients

NORMAL FUNCTION of the human immune system requires the interaction of multiple independent cell lines derived from a common pluripotent hematopoietic stem cell. The most important of these cell lines are the T and B lymphocytes and the phagocytes (macrophages and neutrophils). The B lymphocytes produce the specific antibodies required for humoral immunity, the T lymphocytes are primarily responsible for cell-mediated immunity and the macrophages process antigen in addition to their function as phagocytes.

Immune deficiencies may be congenital, iatrogenic or acquired. Patients with these disorders all show unusual susceptibility to infections and have an increased incidence of malignancy. The types of infections are, in a general way, predictive of the portion of the immune system involved. In patients with defects in humoral immunity, or neutropenia, recurrent infections with pyogenic bacteria tend to develop. Defects in cell-mediated immunity frequently result in disseminated viral, fungal and protozoan *(Pneumocystis carinii)* infections. Because of the complicated interactions of the immune system, patients with humoral immune defects may also have problems with viral infections and, conversely, overwhelming bacterial infections may develop